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CLAIMS WITH MARKINGS TO SHOW CHANGES MADE

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1 1. A system for video production, comprising a source of prerecorded video
2 and audio signals from a prerecorded storage medium, a source of user supplied video
3 and audio signals, a video and audio mixer for combining the prerecorded and user
4 supplied signals to provide combined video and audio outputs, a production monitor
5 connected to the mixer to display to the user the mixed signals, and a storage or
6 reproduction device receiving a mixed video signal output from the mixer, wherein the
7 prerecorded video signals from the prerecorded storage medium have a video signal
8 content prekeyed with a keying signal to indicate areas within the prerecorded video
9 signal to be replaced by the user supplied video signals, the mixer being operative to
10 recognize the keying signal and substitute the user supplied video signal for those
11 portions of said prerecorded video including said keying signal, and the mixer being
12 operative to convert signals from the prompting channel into production control signals.

1 2. A system according to claim 1, wherein the control signals include user
2 prompts displayed on the production monitor but absent from the combined video output.

1 3. A recording medium carrying a prerecorded video signal, prekeyed to
2 define background of images defined by said video signal, which video signal, on
3 playback by a user of the recording medium in apparatus configured to recognize the

8 brightness of at least the lowlights of the prerecorded signal outside said background
 9 areas while maintaining the background areas at or below black level, and a mixer
 10 receiving video signals generated by playback of video signals from said recording
 11 medium and video signals from a user provided source, the mixer including means for
 12 enhancing the brightness of at least the lowlights of the user provided signal to a similar
 13 degree as the lowlight enhancement of the prerecorded signal, and a luminance keyer
 14 receiving said prerecorded signal and said lowlight enhanced user provided signal to
 15 produce an overlaid video signal in which the user signal is overlaid on the keyed
 16 portions of the prerecorded signal, and means for restoring the lowlights of the overlaid
 17 video signal to their original levels to provide an output signal.

Please add the following new claims:

1 8. (New) An apparatus configured to combine video signals from a plurality
 2 of video sources, comprising:
 3 an input configured to receive a first video signal from a pre-recorded video
 4 source and configured to receive a second video signal from a second
 5 video source, the first video signal defining a foreground and including
 6 pre-keyed background portions;
 7 a mixer coupled with the input and configured to replace the identified pre-keyed
 8 background portions of the first video source with the second video
 9 signal to generate a synchronized video signal; and
 10 an output coupled with the mixer and configured to provide the synchronized
 11 video signal to an output device.

1 9. (New) The apparatus of claim 8, wherein the first video source comprises
2 one from a group comprising a videotape, a video disk, a DVD, a Compact Disc, an
3 optical storage medium, a solid state storage medium, and a magnetic storage medium.

1 10. (New) The apparatus of claim 8, wherein the second video source
2 comprises a camera for capturing video images.

1 11. (New) The apparatus of claim 10, wherein the second video signal is a
2 live video signal from the camera for capturing video images.

1 12. (New) The apparatus of claim 8, wherein the mixer further comprises a
2 switcher configured to detect the pre-keyed background portions of the first video signal
3 and configured to generate a combined video signal from non-keyed portions of the first
4 video signal and the second video signal.

1 13. (New) The apparatus of claim 8, wherein the mixer further comprises a
2 brightness enhancement circuit configured to enhance a brightness level of lowlights in
3 the second video signal.

1 14. (New) The apparatus of claim 8, wherein the first video signal comprises
2 a prompting channel.

1 15. (New) The apparatus of claim 14, wherein the prompting channel includes
2 prompting signals.

1 16. (New) The apparatus of claim 15, wherein the mixer further comprises a
2 closed caption decoder configured to extract text from the prompting signal for display on
3 the output device.

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1 17. (New) The apparatus of claim 15, wherein the mixer extracts the control
2 signals from the prompting channel for controlling an external device coupled with the
3 mixer.

1 18. (New) The apparatus of claim 17, wherein the external device is the
2 second video source.

1 19. (New) The apparatus of claim 12, wherein the mixer further comprises a
2 time base control unit configured to receive the first video signal and the second video
3 signal and configured to synchronize the first video signal and the second video signal.

1 20. (New) The apparatus of claim 8, wherein the output device comprises one
2 from a group comprising a videotape, a video disk, a DVD, a Compact Disc, an optical
3 storage medium, a solid state storage medium, and a magnetic storage medium.

1 21. (New) The apparatus of claim 8, wherein the output device comprises one
2 from a group comprising a television and a video monitor.

1 22. (New) The apparatus of claim 8, wherein the first video signal comprises
2 one from a group comprising a composite video signal, an S-video signal, a digital video
3 signal, and an optical digital video signal.

1 23. (New) The apparatus of claim 8, wherein the pre-keyed portions comprise
2 one from a group comprising chroma-key portions and luminance key portions.

1 24. (New) The apparatus of claim 8, wherein the mixer is further configured
2 to identify the pre-keyed background portions of the first video signal prior to
3 replacement of the pre-keyed background portions.

1 25. (New) A method for producing a combined video signal from a plurality
2 of video signals from a plurality of video sources, comprising:
3 receiving a first video signal from a pre-recorded video source, the first video
4 signal including a keying signal;
5 receiving a second video signal from second video source; and
6 replacing the keying signal with the second video signal to generate a video signal
7 comprising portions of the first video signal and the second video
8 signal.

1 26. (New) The method for producing the combined video signal of claim 25,
2 wherein the first video signal further comprises a prompting signal.

1 27. (New) The method for producing the combined video signal of claim 26,
2 wherein the prompting signal includes at least one from a group comprising text,
3 dimension indicators, and camera control signals.

1 28. (New) The method for producing the combined video signal of claim 26,
2 further comprising the step of generating screen prompts from the prompting signal.

1 29. (New) The method for producing the combined video signal of claim 25,
2 further comprising the step of extracting a control signal from the first video signal.

1 30. (New) The method for producing the combined video signal of claim 29,
2 wherein the control signal is adapted to control the second video source.

1 31. (New) The method for producing the combined video signal of claim 25,
2 wherein the keying signal comprises one from a group comprising a chrominance signal,
3 a luminance signal, and a color signal.

1 32. (New) The method for producing the combined video signal of claim 25,
2 wherein the step of replacing further comprises:
3 reading a luminance signal from the first video signal; and
4 blocking at least a portion of the first video signal and passing at least a portion of
5 the second video signal in response to a value of the luminance signal
6 being greater than or equal to a predetermined value.

1 33. (New) The method for producing the combined video signal of claim 25,
2 wherein the step of replacing further comprises:
3 reading a luminance signal from the first video signal; and
4 passing at least a portion of the first video signal and passing at least a portion of
5 the second video signal in response to a value of the luminance signal
6 being greater than or equal to a predetermined value.

1 34. (New) The method for producing the combined video signal of claim 32,
2 wherein the luminance signal of the first video signal further comprises a prompting
3 signal and the method further comprising:
4 passing at least a portion of the luminance signal of the first video signal to a
5 closed caption decoder; and
6 decoding the prompting signal to recover data therein.

1 35. (New) The method for producing the combined video signal of claim 34,
2 further comprising:
3 passing the data to a processing system; and
4 generating control signals from the data.

1 36. (New) The method for producing the combined video signal of claim 25,
2 further comprising:
3 reading a chrominance signal from the first video signal; and
4 blocking at least a portion of the first video signal and passing at least a portion of
5 the second video signal in response to a value of the chrominance
6 signal being greater than or equal to a predetermined value.

1 37. (New) The method for producing the combined video signal of claim 25,
2 further comprising:
3 reading a chrominance signal from the first video signal; and
4 passing at least a portion of the first video signal and blocking at least a portion of
5 the second video signal in response to a value of the chrominance
6 signal being less than or equal to the predetermined value.

1 38. (New) The method for producing the combined video signal of claim 37,
2 wherein the chrominance signal of the first video signal further comprises a prompting
3 signal and the method further comprising:
4 passing at least a portion of the chrominance signal of the first video signal to a
5 closed caption decoder; and
6 decoding the prompting signal to recover data therein.

43. (New) The method for producing the video recording of claim 41,
wherein the keying the identified portion of the first video signal step further comprises
the step of altering a luminance level of the identified portion of the first video signal.

1 44. (New) The method for producing the video recording of claim 41,
2 wherein the video signal includes a prompting channel.

1 45. (New) The method of producing the video recording of claim 44, further
2 comprising providing a prompting signal in the prompting channel for providing one
3 from a group comprising on-screen text prompts and control signals.

1 46. (New) The method for producing the video recording of claim 41,
2 wherein the recording medium further comprises one from a group comprising a Compact
3 Disc medium, a DVD medium, an optical storage medium, solid state storage medium, a
4 video tape medium, and a magnetic storage medium.

1 47. (New) The method for producing the video recording of claim 46,
2 wherein the second video source is a camera configured to capture video signals.

1 48. (New) The method for producing the video recording of claim 47,
2 wherein the camera configured to capture video signals captures live video signals.

1 49. (New) The method for producing the video recording of claim 41, further
2 comprising the step of transmitting the captured and keyed first video signal over one
3 from a group comprising a communication network, a cable television network, and a
4 satellite television network.

1 50. (New) The method of producing the video recording of claim 41, wherein
2 the first video signal comprises one from a group comprising educational video content,
3 entertainment video content, and athletic video content.

1 51. (New) A video playback device configured to provide video signals
2 comprising a portion of a first video signal and a portion of a second video signal, the
3 video playback device comprising:

4 a playback mechanism configured to play a pre-recorded video medium, the pre-
5 recorded medium further comprising a pre-recorded video signal
6 including a pre-keyed portion; and

7 a mixer coupled with the playback mechanism and configured to identify the pre-
8 keyed portion of the pre-recorded video signal and configured to
9 receive a second video signal from a video source, and configured to
10 replace either the pre-keyed portion or a non-pre-keyed portion of the
11 pre-recorded video signal with the second video signal to generate an
12 output video signal.

1 52. (New) The video playback device of claim 51, further comprising an
2 external port configured to couple with an external device for transmitting the output
3 video signal.

1 53. (New) The video playback device of claim 51, wherein the external
2 device comprises one from a group comprising a video monitor, a projection device, and
3 a television.

1 54. (New) The video playback device of claim 51, wherein the pre-recorded
2 medium comprises one from a group comprising a videotape medium, a video disk
3 medium, a DVD medium, a Compact Disc medium, a magnetic storage medium, a solid
4 state storage medium, and an optical storage medium.

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1 55. (New) The apparatus of claim 51, wherein the video source comprises a
2 camera for capturing video signals.

1 56. (New) The apparatus of claim 55, wherein the second video signal from
2 the camera for capturing video signals comprises a live video signal.

1 57. (New) The apparatus of claim 51, wherein the mixer further comprises a
2 switcher configured to detect the pre-keyed portions of the pre-recorded video signal.

1 58. (New) The apparatus of claim 57, wherein the mixer further comprises a
2 brightness enhancement circuit configured to enhance a brightness level of lowlights in
3 the second video signal.

1 59. (New) The apparatus of claim 57, wherein the pre-recorded video signal
2 further comprises a prompting channel.

1 60. (New) The apparatus of claim 59, wherein the prompting channel includes
2 prompting signals.

1 61. (New) The apparatus of claim 59, wherein the mixer further comprises a
2 closed caption decoder configured to extract text from the prompting channel for display
3 on an external device.

1 62. (New) The apparatus of claim 59, wherein the mixer extracts control
2 signals from the prompting channel for controlling an external device coupled with the
3 mixer.

1 63. (New) The apparatus of claim 62, wherein the external device comprises
2 one from a group comprising a video monitor, a projection device, and a television.

1 64. (New) The apparatus of claim 57, wherein the mixer further comprises a
2 time base control unit configured to receive the pre-recorded video signal and the second
3 video signal and configured to synchronize the pre-recorded video signal and the second
4 video signal.

1 65. (New) The apparatus of claim 52, wherein the external port couples with
2 one from a group comprising a video tape playback device, a video disk playback device,
3 a Compact Disc playback device, a DVD playback device, a solid state storage device, an
4 optical storage device, and a magnetic storage device.

1 66. (New) The apparatus of claim 51, wherein the pre-recorded video signal
2 comprises one from a group comprising a composite video signal, an S-video signal, a
3 digital video signal, and an optical digital video signal.

1 67. (New) The apparatus of claim 51, wherein the pre-keyed portions of the
2 pre-recorded video signal comprise one from a group comprising chroma-key portions
3 and luminance key portions.

1 68. (New) The apparatus of claim 51, wherein the pre-recorded medium
2 comprises a video source connected through a communications network.

1 69. (New) An apparatus configured to combine video signals from a plurality
2 of video sources, comprising:

3 an input configured to receive a first video signal from a pre-recorded video
4 source and configured to receive a second video signal from a second
5 video source, the first video signal including a keyed portion and a
6 non-keyed portion;

7 a mixer coupled with the input and configured to replace either the keyed portion
8 or the non-keyed portion with the second video signal to generate a
9 synchronized video signal; and
10 an output coupled with the mixer and configured to provide the synchronized
11 video signal for an output device.

1 70. (New) The apparatus of claim 69, wherein the keyed portion is a
2 background portion and the non-keyed portion is a foreground portion of the first video
3 signal.

1 71. (New) The apparatus of claim 69, wherein the non-keyed portion is a
2 background portion and the keyed portion is a foreground portion of the video signal.

1 72. (New) The apparatus of claim 69, wherein the first video source
2 comprises one from a group comprising a videotape, a video disk, a DVD, a Compact
3 Disc, a solid state memory medium, an optical storage medium, and a magnetic storage
4 medium.

1 73. (New) The apparatus of claim 69, wherein the second video source
2 comprises a camera for capturing video.

1 74. (New) The apparatus of claim 73, wherein the second video signal
2 comprises a live video signal from the camera for capturing video.

1 75. (New) The apparatus of claim 69, wherein the mixer further comprises a
2 switcher configured to detect the non-keyed portion of the first video signal and
3 configured to generate the synchronized video signal from the non-keyed portions of the
4 first video signal and the second video signal.

1 76. (New) The apparatus of claim 69, wherein the mixer further comprises a
2 switcher configured to detect the keyed portion of the first video signal and configured to
3 generate the synchronized video signal from the keyed portions of the first video signal
4 and the second video signal.

1 77. (New) The apparatus of claim 69, wherein the mixer further comprises a
2 brightness enhancement circuit configured to enhance a brightness level of lowlights in
3 the second video signal.

1 78. (New) The apparatus of claim 69, wherein the first video signal further
2 comprises a prompting channel.

1 79. (New) The apparatus of claim 78, wherein the prompting channel includes
2 prompting signals.

1 80. (New) The apparatus of claim 79, wherein the mixer further comprises a
2 closed caption decoder configured to extract text from the prompting signal for display on
3 the output device.

1 81. (New) The apparatus of claim 78, wherein the mixer extracts the control
2 signals from the prompting channel for controlling an external device coupled with the
3 mixer.

1 82. (New) The apparatus of claim 81, wherein the external device comprises
2 one from a group comprising a video monitor, a projection device, and a television.

1 83. (New) The apparatus of claim 69, wherein the mixer further comprises a
2 time base control unit configured to receive the first video signal and the second video
3 signal to synchronize the first video signal and the second video signal.

3 receiving a first video signal from a pre-recorded video source, the first video
4 signal further comprising a keyed portion and a non-keyed portion;
5 receiving a second video signal from second video source; and

6 replacing either the keyed portion or the non-keyed portion of the first video
7 signal with the second video signal to generate a third video signal
8 comprising portions of the first video signal and the second video
9 signal.

1 92. (New) The method for combining video signals of claim 91, wherein the
2 first video signal further comprises a prompting signal.

1 93. (New) The method for combining video signals of claim 92, wherein the
2 prompting signal includes at least one from a group comprising text, dimension
3 indicators, and camera control signals.

1 94. (New) The method for combining video signals of claim 92, further
2 comprising the step of generating screen prompts from the prompting signal.

1 95. (New) The method for combining video signals of claim 91, further
2 comprising the step of extracting a control signal from the first video signal.

1 96. (New) The method for combining video signals of claim 95, wherein the
2 control signal is adapted to control the second video source.

1 97. (New) The method for combining video signals of claim 91, wherein the
2 keyed portion of the first video signal comprises a background portion.

1 98. (New) The method for combining video signals of claim 91, wherein the
2 non-keyed portion of the first video signal comprises a background portion.

1 99. (New) The method for combining video signals of claim 91, wherein the
2 keyed portion of the first video signal comprises a foreground portion.

1 100. (New) The method for combining video signals of claim 91, wherein the
2 non-keyed portion of the first video signal comprises a foreground portion.

1 101. (New) The method for combining video signals of claim 91, wherein the
2 keyed portion of the first video signal is a chrominance signal.

1 102. (New) The method for combining video signals of claim 91, wherein the
2 non-keyed portion of the first video signal is a chrominance signal.

1 103. (New) The method for combining video signals of claim 91, wherein the
2 keyed portion of the first video signal is a luminance signal.

1 104. (New) The method for combining video signals of claim 91, wherein the
2 non-keyed portion of the first video signal is a luminance signal.

1 105. (New) The method for combining video signals of claim 91, further
2 comprising:

3 reading a luminance signal from the first video signal; and

4 blocking at least a portion of the first video signal and passing at least a portion of

5 the second video signal in response to a value of the luminance signal

6 being greater than or equal to a predetermined value.

1 106. (New) The method for combining video signals of claim 105, wherein the
2 luminance signal of the first video signal further comprises a prompting signal and the
3 method further comprising:

4 passing at least a portion of the luminance signal of the first video signal to a

5 closed caption decoder; and

6 decoding the prompting signal to recover data therein.

1 107. (New) The method for combining video signals of claim 106, further
2 comprising:

3 passing the data to a processing system; and

4 generating control signals from the data.

1 108. (New) The method for combining video signals of claim 91, further
2 comprising:

3 reading a chrominance signal from the first video signal; and

4 blocking at least a portion of the first video signal and passing at least a portion of

5 the second video signal in response to a value of the chrominance

6 signal being greater than or equal to a predetermined value.

1 109. (New) The method for combining video signals of claim 108, wherein the
2 chrominance signal of the first video signal further comprises a prompting signal and the
3 method further comprising:

4 passing at least a portion of the chrominance signal of the first video signal to a

5 closed caption decoder; and

6 decoding the prompting signal to recover data therein.

1 110. (New) The method for combining video signals of claim 109, further
2 comprising:

3 passing the data to a processing system; and

4 generating control signals from the data.

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1 111. (New) The method for combining video signals of claim 91, wherein the
2 first video source comprises one from a group comprising a videotape medium, a video
3 disk medium, a DVD medium, a Compact Disc medium, an optical storage medium, a
4 solid state storage medium, and a magnetic storage medium.

1 112. (New) The method for combining video signals of claim 91, wherein the
2 second video source comprises a video camera.

1 113. (New) The method for combining video signals of claim 91, wherein the
2 third video signal comprises an output video signal.

1 114. (New) The method for combining video signals of claim 113, further
2 comprising supplying the output video signal to an output device.

1 115. (New) The method for combining video signals of claim 114, wherein the
2 output device comprises one from a group of a visual display device and a data signal
3 storage device.

1 116. (New) The method for combining video signals of claim 91, wherein the
2 first video source comprises a computing device connected through a communications
3 network.

1 117. (New) An apparatus configured to generate a synchronized video signal
2 from a plurality of video signals, comprising:
3 an input means for receiving a first video signal from a means for storing and for
4 receiving a second video signal from a means for capturing video, the
5 first video signal including a keyed portion and a non-keyed portion;

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6 a mixing means coupled with the input means for replacing either the keyed
7 portion or the non-keyed portion with the second video signal and for
8 generating a synchronized video signal; and
9 an output means coupled with the mixing means for outputting the synchronized
10 video signal to an output device.

1 118. (New) The apparatus of claim 117, wherein the keyed portion is a
2 background portion and the non-keyed portion is a foreground portion of the first video
3 signal.

1 119. (New) The apparatus of claim 117, wherein the non-keyed portion is a
2 background portion and the keyed portion is a foreground portion of the video signal.

1 120. (New) The apparatus of claim 117, wherein the means for storing
2 comprises one from a group comprising a videotape, a video disk, a DVD, a Compact
3 Disc, a solid state memory medium, an optical storage medium, and a magnetic storage
4 medium.

1 121. (New) The apparatus of claim 117, wherein the means for capturing video
2 comprises a second video source.

1 122. (New) The apparatus of claim 121, wherein the second video signal
2 comprises a live video signal from the second video source.

1 123. (New) The apparatus of claim 117, wherein the means for mixing further
2 comprises a means for detecting the non-keyed portion of the first video signal and a
3 means for generating the synchronized video signal from the non-keyed portions of the
4 first video signal and the second video signal.

1 124. (New) The apparatus of claim 117, wherein the means for mixing further
2 comprises means for detecting the keyed portion of the first video signal and a means for
3 generating the synchronized video signal from the keyed portions of the first video signal
4 and the second video signal.

1 125. (New) The apparatus of claim 117, wherein the means for mixing further
2 comprises a means for enhancing a brightness level of lowlights in the second video
3 signal.

1 126. (New) The apparatus of claim 117, wherein the first video signal further
2 comprises a prompting channel.

1 127. (New) The apparatus of claim 126, wherein the prompting channel
2 includes prompting signals.

1 128. (New) The apparatus of claim 127, wherein the means for mixing further
2 comprises a means for extracting text from the prompting signal for display on the output
3 device.

1 129. (New) The apparatus of claim 126, wherein the means for mixing further
2 comprises a means for extracting the control signals from the prompting channel for
3 controlling an external device.

1 130. (New) The apparatus of claim 129, wherein the external device comprises
2 one from a group comprising a video monitor, a projection device, and a television.

1 131. (New) The apparatus of claim 117, wherein the output device comprises
2 one from a group comprising a videotape device, a video disk device, a DVD device, a

3 Compact Disc device, an optical storage device, a solid state storage device, and a
4 magnetic storage device.

1 132. (New) The apparatus of claim 117, wherein the output device comprises
2 one from a group comprising a video monitor, a projection device, and a television.

1 133. (New) The apparatus of claim 117, wherein the first video signal
2 comprises one from a group comprising a composite video signal, an S-video signal, a
3 digital video signal, and an optical digital video signal.

1 134. (New) The apparatus of claim 117, wherein the keyed portion of the first
2 video signal comprises a chroma-key portion.

1 135. (New) The apparatus of claim 117, wherein the keyed portion of the first
2 video signal comprises a luminance key portion.

1 136. (New) The apparatus of claim 117, wherein the non-keyed portion of the
2 first video signal comprises a chroma-key portion

1 137. (New) The apparatus of claim 117, wherein the non-keyed portion
2 of the first video signal comprises a luminance key portion.

1 138. (New) The apparatus of claim 117, wherein the means for mixing
2 comprises a mixer.